

Name: \_\_\_\_\_

### p1029: Combine Like Terms (v4)

#### Example

Combine like terms.

$$2x^2 - 7x - 3 + 3 + 8x^2 - 4x - 5x^2 + 1 + 5x - 2$$

#### Answer

Combine the quadratic terms.

$$2x^2 + 8x^2 - 5x^2 \equiv 5x^2$$

Combine the linear terms.

$$-7x - 4x + 5x \equiv -6x$$

Combine the constant terms.

$$-3 + 3 + 1 - 2 \equiv -1$$

The final result:

$$5x^2 - 6x - 1$$

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#### Question 1

Combine like terms.

$$-8 + 6 + 3x^2 - 5x^2 + 4x^2 - 4 + 8x - 9x + 5x + 7x$$

$$2x^2 + 11x - 6$$

**Question 2**

Combine like terms.

$$3x^2 - 5x - 1 - 8 + x - 6x^2 - 2x^2 + 5 + 6x - 4x$$

$$\textcolor{red}{-5x^2 - 2x - 4}$$

**Question 3**

Combine like terms.

$$-5 - 2x - 6x + x - 9 + 8 + 5x^2 + 7x^2 + 3x^2 + 2x$$

$$\textcolor{red}{15x^2 - 5x - 6}$$

**Question 4**

Combine like terms.

$$-5 - 9x + 7 - 3x^2 + 2 + 8x + 5x^2 - 8x^2 + 4x - 7x^2$$

$$\textcolor{red}{-13x^2 + 3x + 4}$$